Blue Team

Retired Mississippi Gal

Scenario

- A sweet young Mississippi gal, retired from NRCS, so fairly poor, inherited a tract of land in Oswego County.
- She wants to know if there are programs in NY she can use to develop this site for wildlife.
- She likes waterbirds, herps and mammals.

Objectives

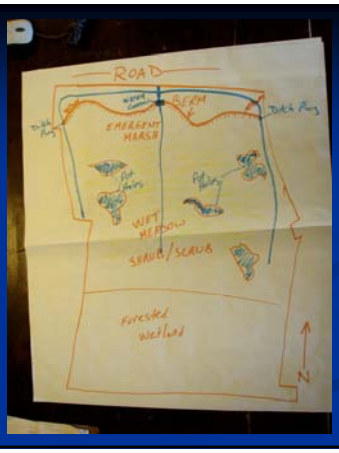
- Improve wetland wildlife habitat for:
  - Waterbirds
  - Herps
  - Mammals
- Restore wetland hydrology
- Restore native vegetative communities

Success Criteria

- Evidence of use of wetland by target species or groups within 5 years
  - Shorebirds
  - Wading birds
  - Ducks & geese
  - Herps
  - Mammals

Components of Restoration

- 1 berm
- 2 ditch plugs
- 1 water control structure
- Dig potholes
- Create microtopography with spoil and woody debris



Existing Conditions

- Vegetation
  - Dominated by upland herbaceous species
  - Sparse wetland species: rush, sedge
  - Few early-successional woody species present: gray birch, cottonwood, willow
  - Few invasive species present: *Phragmites*, purple loosestrife
- Wildlife
  - Limited use by wetland species

Existing Conditions cont'd

- Soils
  - Deep muck soil, > 16"
  - Periodically saturated
- Hydrology
  - Heavily tiled, drainage ditches throughout
  - Drained by a single culvert under the road
  - Seasonally high water table

Proposed Planting Plan

- Seed & mulch dike
- Natural regeneration of emergent marsh
- Seed spoil piles with wetland mix
- Woody species planted on spoil piles and transition areas
  - Dogwood cuttings
  - Blueberry & spicebush plugs
- Natural regeneration in shrub-forest section

Engineering Features

- 2700 linear feet of curvilinear berm
  - Constructed from mineral soils on periphery of site
  - 4 foot overall height with 4:1 slope
  - One spillway at either end of the berm
- One water control structure sized to accommodate 25 year, 24 hr storm
- Plug the two perimeter ditches

Water Source

- Ground water
- Surface runoff

Wildlife Considerations

- Create variety of habitat types to benefit a diverse wildlife population
  - Aquatic bed (diving ducks, wood ducks, turtles)
  - Emergent vegetation (dabbling ducks, shorebirds, waders, turtles, frogs)
  - Mud flats (shorebirds)
  - Pools (amphibians, waders, ducks)
  - Transitional meadow & shrubland (waterfowl nesting)

Funding Sources

- USDA WRP program
- USFWS Partners for Wildlife
- Ducks Unlimited
- National Fish & Wildlife Foundation
- NAWCA grant
- DEC State Wildlife Grants

Timetable

- Acquire easement & contracting – 1 year
- Survey & Design – 6 months
  - Includes permitting & alternatives analysis
  - Soils investigation
  - Water budget
- Construction – 3 weeks (August)
- Control Phragmites

Timetable cont'd

- Planting
  - Berm seeded when constructed
  - Cuttings and plugs planted the following spring
- Install boards in water control structure to flood site in late summer.
- Total time approximately 18 months

Operation & Maintenance

- Maintain shallow water areas ranging from 0-2 feet over ~ 75 acres
- Drawdown every 3 – 4 years depending on vegetation per agreement
- Maintain condition of berm
- If funding is available from outside sources
  - Shallow disking of the shallow marsh areas to benefit annuals (ducks)
  - Control of invasive plants on site and as they encroach

Monitoring

- Annual monitoring of vegetation
  - Extent of invasive species
  - Qualitative assessment of site vegetation, following WRP recommendations
  - Photo points
- Annual monitoring of target wildlife use
  - Qualitative assessment of presence of wetland-dependent wildlife

Overall Feasibility of Site

- High restoration potential
- Site will likely rank well for WRP